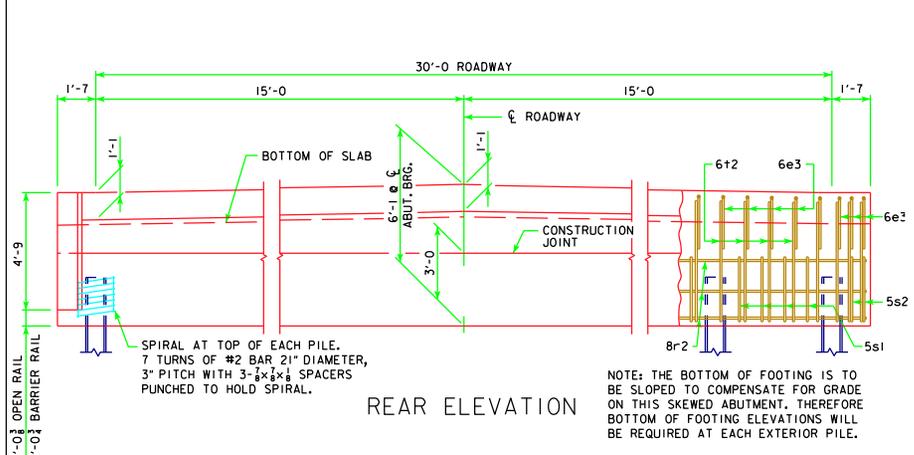
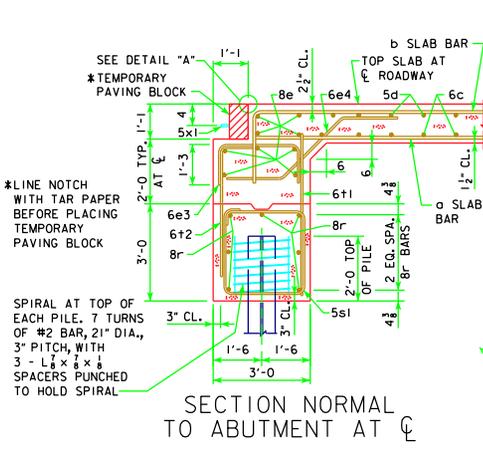


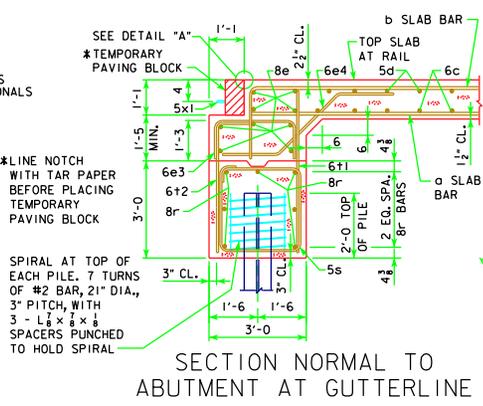
REVISED 12-08 - REVISED SHEET FOR NEW PAVING NOTCH DESIGN FOR HL-93 LOADING.



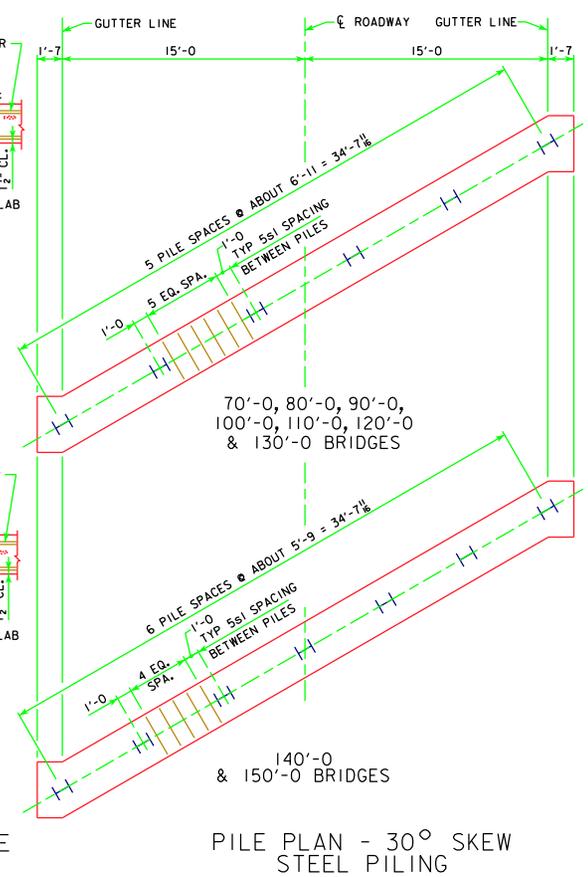
REAR ELEVATION



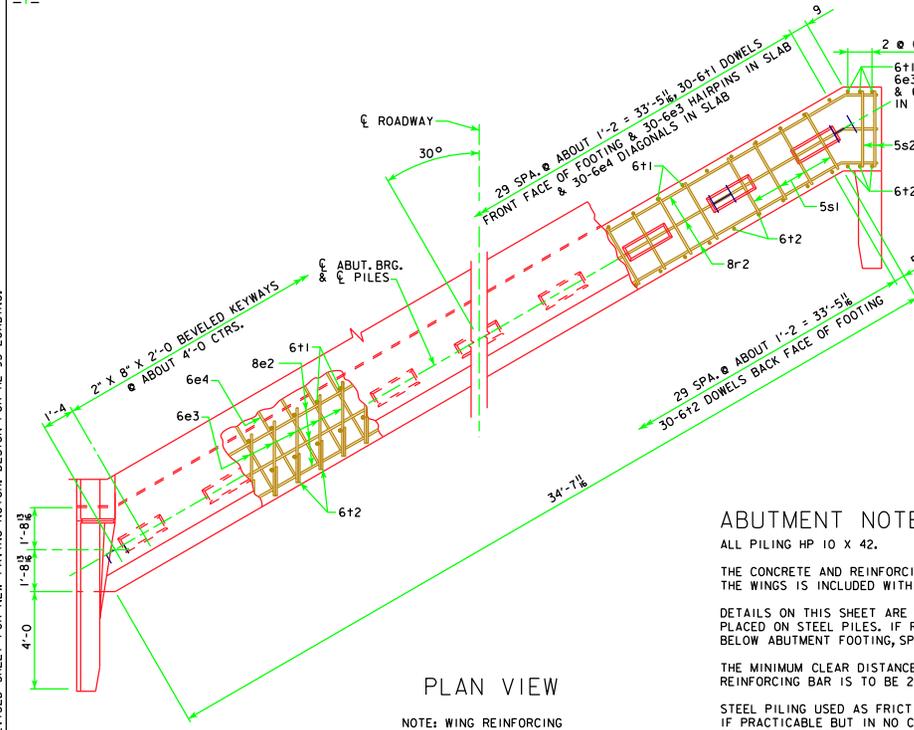
SECTION NORMAL TO ABUTMENT AT CL



SECTION NORMAL TO ABUTMENT AT GUTTERLINE



PILE PLAN - 30° SKEW STEEL PILING



PLAN VIEW

ABUTMENT NOTES:

- ALL PILING HP 10 X 42.
- THE CONCRETE AND REINFORCING STEEL FOR THE WINGS IS INCLUDED WITH THE SUPERSTRUCTURE.
- DETAILS ON THIS SHEET ARE TO BE USED ONLY WHEN ABUTMENTS ARE PLACED ON STEEL PILES. IF ROCK IS ENCOUNTERED CLOSER THAN 12' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.
- THE MINIMUM CLEAR DISTANCE FROM THE FACE OF THE CONCRETE TO NEAR REINFORCING BAR IS TO BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.
- STEEL PILING USED AS FRICTION PILE SHALL BE DRIVEN TO FULL PENETRATION IF PRACTICABLE BUT IN NO CASE TO A BEARING VALUE LESS THAN THE PILE BEARING REQUIRED FOR EACH BRIDGE LENGTH AS SHOWN ON THIS SHEET.
- ALL REINFORCING STEEL IS TO BE GRADE 60.
- ABUTMENT PILING WAS DESIGNED FOR HL-93 LOADING WITH AN ALLOWANCE FOR 20 LBS. PER SQ. FT. FUTURE WEARING SURFACE.



DETAIL "A"

REACTION, PILE NUMBER & BEARING										
BRIDGE LENGTH	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0	
REACTION - KIPS	298	315	331	351	370	393	415	Δ 474	Δ 500	
BEARING - TONS	25	27	28	30	31	33	35	34	36	
PILING - NUMBER	6	6	6	6	6	6	6	7	7	
STRENGTH I REACTION - KIPS	393	418	442	472	501	535	567	Δ 663	Δ 701	

Δ INCLUDES IMPACT

NOTE: WING REINFORCING AND RAIL NOT SHOWN.
6e3, 6e4, AND 8e2 ARE INCLUDED WITH SUPERSTRUCTURE QUANTITIES.

12-08
LATEST REVISION DATE

Thomas C. McQuinn
APPROVED BY BRIDGE ENGINEER

STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES
CONTINUOUS CONCRETE SLAB BRIDGES
NOVEMBER, 2006

30° ABUTMENT DETAILS
30° SKEW - STEEL PILING

J30-36-06